

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph on page 8, lines 11-13 of the specification as follows:

at step 36[[34]], the windowed data are transformed to the frequency domain using a 512 point Fast Fourier Transform (FFT). The outputs of the FFT are 512 frequency bins representing signal frequencies from DC (0 Hz) to 16 kHz with complex numbers;

Please replace the paragraph on page 8, lines 20-21 of the specification as follows:

at step 40[[42]], the output of the transposition is transformed from the frequency domain to the time domain using a 512 point Inverse Fast Fourier Transform (IFFT);

Please replace the paragraph on page 8, lines 23-24 of the specification as follows:

The output of the windowing block 44[[42]] is combined with its output of the previous cycle (256 samples ago) in block 46 using a 50% Overlap and Add method.

Please replace the paragraph on page 9, lines 1-4 of the specification as follows:

In this embodiment, the frequency manipulation occurs in the time domain. Consequently, instead of the use of an FFT at step 36[[34]] and its IFFT at step 40[[42]], a time domain analysis filter bank is used at step 36 prior to the transposition step 38 and a time domain synthesis filter bank is used at a step 40 after the transposition step 38.

Please replace the paragraph on page 9, lines 23-27 of the specification as follows:

In yet a further embodiment of the invention, the auxiliary signal processor effects manipulation of the high frequency components by using a Laguerre Transform at step 36[[34]] instead of a FFT and, as a result, an Inverse Laguerre Transform at step 40[[42]] as shown in Figure 6 of the drawings where, with reference to Figure 2 of the drawings, like reference numerals refer to like parts unless otherwise specified.

Please replace the paragraph on page 10, lines 7-20 of the specification as follows:

In a development of the invention, the equipment 10 can be provided with a communications receiver 60 (FIGS. 7 and 8) to enable the wearer to receive auxiliary audio signals to be rendered as virtual audio. As shown at step 31 the auxiliary audio signals are processed by a virtual auditory space rendering engine using the techniques described in PCT/AU01/00038 referenced above. The processing of the auxiliary audio signals using virtual audio space techniques creates an effect for the listener that the sound originate at specific locations in a personal auditory space around the listener's head. At step 33 the processed auxiliary audio signals are incorporated to produce, after the frequency manipulation steps 32, 36[[34]], 38, 40[[42]], 44 and 46, an output audio signal including a virtual audio component. The techniques to produce an output audio signal including a virtual audio component is described in the Applicants co-pending International Patent Application No. PCT/AU 2004/000902 filed 2 Jul. 2004 and entitled "The production of augmented reality audio." The contents of that International Patent Application are incorporated herein by reference.